

Abstract

5 The invention relates to a process for producing a catalyst for gas-phase oxidations, which comprises weighing a particulate inert support having a total mass of $M_{support}$ into a fluidized-bed apparatus, providing an aqueous suspension of a catalytically active material or sources therefor and a binder having a binder content of B_{susp} , fluidizing the inert support by introduction of a gas stream heated to a temperature of T_{gas} at a flow rate of Q_{gas} , and spraying the suspension at a rate of Q_{susp} onto the fluidized inert

10 support. When Q_{gas} , Q_{susp} , B_{susp} , $M_{support}$ and T_{gas} are selected within the ranges

$$\begin{array}{ll} 3000 \leq Q_{gas} [\text{m}^3/\text{h}] \leq 9000, & 1000 \leq Q_{susp} [\text{g/min}] \leq 3500, \\ 2 \leq B_{susp} [\% \text{ by weight}] \leq 18, & 60 \leq M_{support} [\text{kg}] \leq 240. \\ 75 \leq T_{gas} [\text{°C}] \leq 120 & \end{array}$$

so that a parameter K defined as

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$$K = 0.020 Q_{gas} - 0.055 Q_{susp} + 7.500 B_{susp} - 0.667 M_{support} + 2.069 T_{gas} - 7$$
 satisfies the relationship $127.5 \leq K \leq 202$, high-quality coatings can be produced and the formation of twins made up of support particles adhering to one another can be avoided.